The Osprey, founded twenty years ago on the inspired vision of Bob Arnold and Stan Young, has championed the conservation of wild, naturally spawning steelhead. From our inception, we have taken wild steelhead to be our constituency and their health, life history diversity and abundance the measures of our performance. Our target audiences have been state and federal resource managers, commissioners, legislators, etc. (i.e. those folks who are responsible for and capable of making decisions affecting the four H’s and thus wild steelhead health); fisheries biologists; concerned citizens; and the broader, general public who, hopefully, would hold public officials accountable for management decisions. So, at the twenty year mark, how have we done?

On the negative side, wild steelhead in British Columbia and the lower 48 in the United States are at much higher risk of extinction today than when The Osprey was first published. With isolated exceptions, all U.S. steelhead stocks in the lower 48 states are either already extinct (hundreds of local stocks) or are federally listed under the Endangered Species Act as threatened with extinction or in imminent danger of extinction (more on this sorry tale below). Particularly worrisome is the precipitous decline of Georgia Basin (Puget Sound, east coast of Vancouver Island and B.C. mainland opposite Vancouver Island) steelhead stocks. Most of these stocks are in free fall with many runs declining from thousands of individual fish to a few score, including many populations in rivers with pristine or near pristine habitat. The causes of these precipitous and continuing declines are not known, and little is being done by management agencies to determine the causes.

On the plus side, The Osprey has established itself as the authoritative publication devoted to wild steelhead conservation and science. Now, The Osprey is universally recognized as the authoritative publication by agency biologists, legislators, commissioners and the public. More importantly, The Osprey has contributed significantly to changing the terms of discussion relative to wild steelhead conservation.

Wild Steelhead Management Plans

The Osprey has long championed the development and adoption by state and federal management agencies of formal wild steelhead management plans that incorporate effective biological monitoring, protection of habitat,
20 Years of Fighting for Wild Steelhead

by Jim Yuskavitch

The first issue of The Osprey appeared in January 1987 as a vehicle for the Federation of Fly Fishers' Steelhead Committee to reach steelhead fly anglers who were concerned about the future of wild steelhead and the sport of steelhead fly fishing. The Steelhead Committee had been formed a year earlier by Washington steelheader Bob Arnold and had 10 members, including Stan Young, The Osprey's first editor.

In that inaugural issue, Stan wrote that the Steelhead Committee was created to “marshal a strong voice for the steelhead resource” and hoped that the Steelhead Committee and The Osprey would eventually broaden their scope to become a “truly regional effort.”

That first issue was a simple affair — three double-sided photocopied pages stapled in the upper left hand corner, its logo, a watchful osprey perched on a branch, a striking bird of prey that steelheaders recognize as a fellow fisherman along steelhead waters.

That issue also included an essay by Arnold describing how the committee was formed, steelhead reports from Washington, Idaho and Oregon, along with short articles discussing conservation issues of the day including disease spread by hatcheries, logging in riparian zones, plans to dredge the Columbia’s pristine Hanford Reach and the lack of solid wild steelhead management plans by state fish and wildlife agencies.

Since that first issue outlining the mission of the Steelhead Committee and its official publication, the committee and The Osprey have never looked back.

As current editor, and one of a long line of them, I come late in the game. While many people deserve credit for what the committee has created, two deserve special recognition — Stan Young, founding editor and committee member and John Sager, another long time editor and committee member. Without them, there very well may not have been The Osprey. I am happy to say both still serve on the Steelhead Committee and the editorial board of The Osprey, helping behind the scenes to make this publication a valuable tool and source of information for people who care about wild steelhead, salmon and all of our country’s invaluable natural resources.

As you read this special twentieth anniversary issue of The Osprey, we hope you will agree that we have, and are continuing to, stay true to our mission.
The ESA and Steelhead

by Bill Redman
— Steelhead Committee —

The Endangered Species Act was passed by an overwhelming vote of Congress and signed into law in 1973. Science based implementation by federal agencies can make it a powerful tool that provides for the protection and recovery of severely depressed wild species. It provides for citizens to petition for listing of species as Endangered or Threatened. Fortunately, in the event of agency inaction or weak action, the ESA also provides for citizen resort to the federal courts.

The federal agency responsible for ESA protection of steelhead and Pacific salmon is NOAA Fisheries (formerly the National Marine Fisheries Service). The challenge from the early days of the ESA has been getting the agency to carry out its ESA mandated duties and implement the law. Nearly every ESA listing of salmon and steelhead has come about as a result of citizen action, not agency initiative.

Almost 20 years after passage of the law, the ESA was first applied to salmon. In 1991, Sacramento River Winter Run Chinook and Snake River Sockeye were ESA listed. In 1992, Snake River Fall Chinook and Spring/Summer Chinook followed. Additional listings were added through the 1990s.

The Osprey has been advocating for ESA protection of salmon and steelhead at least as far back as the September 1990 issue. In it, Bill Bakke, executive director of the Native Fish Society, encouraged use of the ESA to protect Columbia/Snake salmon stocks. The editor at that time, Jack De Yonge wrote: “It’s amazing how negotiations begin to get serious when that sword (the ESA) is brandished. Its bright tip tends to concentrate the attention of those who think the earth was created to rip up as they want.” The ESA says Jack should have been right in that statement, but as more recent events have unfolded, NOAA’s concentration of attention has changed to inventing new ways to avoid using the ESA to truly protect salmon and steelhead.

The ESA and Steelhead

Pete Soverel’s lead article in this issue reviews in vivid detail the unsuccessful early efforts by conservation organizations to apply the ESA to steelhead. After these fruitless attempts, conservation organizations, including the Federation of Fly Fishers, submitted a petition in 1994 to list all of the coastal steelhead stocks in Washington, Oregon and California. In response NOAA settled on a classification of 15 Evolutionarily Significant Units (ESUs) to cover all of the populations in the native range of steelhead in the lower 48 states. They defined an ESU as a group of geographically contiguous, substantially reproductively isolated stocks that is a significant part of the evolutionary legacy of the species. When NOAA had not answered the petition within the one year time deadline, the petitioners began legal action. Finally, from 1996 to 1999 NOAA listed ten of the 15 ESUs. Two were listed as Endangered, eight were listed as Threatened, one is considered a species of concern, and only four were considered healthy, and that was a huge stretch considering the declining returns. In 2006, NOAA drafted a listing of the Puget Sound Steelhead ESU as Threatened. All in all, a gloomy picture.

To understand the frustrations involved in getting NOAA to really protect these fish under the ESA, we need to review briefly two winding trails: (1) the succession of Biological Opinions (BiOps) for ESA listed steelhead and salmon in the Columbia/Snake system; and (2) the NOAA hatchery policies.

The Columbia Biological Opinions

The most protracted and exasperating sequence of events has been the repeated failure of NOAA Fisheries to respond to the petitions and suits by citizen organizations seeking to achieve real ESA protection for the steelhead and salmon stocks that must negotiate the Columbia/Snake Hydro System.

After the initial listings of Columbia system salmon in 1991, NOAA produced the first of five Biological Opinions (Recovery Plans) in 1993. It concluded the hydro system posed no jeopardy to the listed fish and became the object of a suit by the Idaho Department of Fish and Game and others. The BiOp was thrown out of court in 1994 by Federal District Judge Malcolm Marsh. He found the NOAA action to be “arbitrary and capricious and otherwise not in accordance with the meaning and underlying purposes of the Endangered Species Act. … the process is seriously, ‘significantly’ flawed because it is too heavily geared toward a status quo that has allowed all forms of river activity to proceed in a deficit situation – that is, relatively small steps, minor improvements and adjustments — when the situation literally cries out for a major overhaul.” One would think that message would have gotten through. It still hasn’t.

Continued on page 22
The Osprey at Twenty
Continued from page 1

reduction of hatchery interactions and so on. At the urgings of the Steelhead Committee and The Osprey, the Federation of Fly Fishers, to which The Osprey and Steelhead Committee are affiliated, adopted a wild steelhead policy, key features of which included: Management agencies manage for wild, natural production; release all wild steelhead; hatcheries are harmful to wild stocks and should be discontinued in most instances; where continued, their impact on wild fish must be dramatically reduced and; when used for mitigation, hatcheries should be only one of several management options (passage, fish friendly flow regimes, etc.) rather than the only mitigation action. In general, hatcheries are an admission to failure.

Oregon has a wild steelhead management plan. Alaska and British Columbia specifically manage for wild production. Washington is in the throes of developing a state-wide steelhead resource management plan to be coupled with watershed level management plans that specifically address the need to conserve wild steelhead. Of course, these steelhead management plans do not necessarily translate to effective action, but at The Osprey we view these management plans as hopeful signs that agencies are beginning to accept the primacy of wild steelhead in their management actions.

Wild Steelhead Release

The Osprey has hammered relentlessly on the need to release all wild steelhead to increase wild steelhead escapements. Twenty years ago, much of the public and all of the agencies equated recreational opportunity with harvest of wild steelhead. Now, with the archaic exception of Washington, which allows continued harvest of wild steelhead from a dozen or so Olympic Peninsula streams, wild steelhead release regulations (summer and winter runs) are in force throughout the Pacific Northwest including British Columbia. The Osprey and FFF Steelhead Committee have consistently been in the vanguard of these efforts which are finally paying off in universal, year-round wild steelhead release regulations that are strongly supported and advocated by the angling public.

Historic Abundance/Life-History Diversity

West Coast steelhead populations are presently about 2%-5% of historic abundance. The Osprey has been a leader in advocating that management set much higher escapement goals and incorporate recovery of life history diversity as key goals in all wild steelhead management plans. This is an emerging debate and the outcome is not certain. However, there appears to be strong support, at least at the staff level, within state agencies for specific efforts to set higher population goals, and a recognition that those higher goals cannot be achieved without recovery of life-history diversity so that steelhead may utilize the various habitat niches that currently exist.

Restoration of the early returning/early spawning life history component to wild steelhead populations is an especially urgent need. Before the wholesale introduction of hatchery fish, these life histories were the most abundant component in natural runs. Climate change, perhaps associated with global warming, has altered the natural hydrograph of Northwest rivers with November replacing December as the month with the greatest rainfall, and pushed ahead spring run-off by about one month. If these trends continue, spring run-off will move even earlier into the late winter (i.e. February/March) with longer low flows in the summer/fall – all of which will further stress late returning/late spawning steelhead, while rewarding early returning/early spawning fish. In any case, insuring the broadest range of life history diversity will insure the greatest resilience in the face of environmental change.

ESA Listing

The FFF Steelhead Committee and The Osprey were instrumental in the federal listings of most West Coast salmon and steelhead stocks. The history is illustrative. In 1990, when the number of sockeye salmon returning to Redfish Lake in Idaho had declined to single digits, citizens petitioned the federal government under the terms of the Endangered Species Act to list Redfish Lake sockeye as an endangered population. At first, the National Marine Fisheries Service declined to list on the basis that they were not able to determine with certainty the genetic/evolutionary origin of the then current Redfish Lake sockeye population. After reconsideration (and pressure from conservation groups including the Steelhead Committee of the FFF), NMFS did, in fact, list the population as an endangered, reproductively isolated, evolutionarily isolated, evolutionarily significant population group.

In July of 1992, the FFF and others petitioned to list Oregon’s Illinois River winter steelhead as a threatened reproductively isolated and evolutionarily significant population group (separated from other winter run populations by a major waterfall). NMFS declined on the grounds that the population was neither reproductively isolated nor evolutionarily significant. Uncertain as to the meaning of those terms, the FFF and others then petitioned in December 1993 to list Washington’s Deer Creek summer runs (unique population of summer runs – one life history, found only in Deer Creek). Again NMFS declined on the same grounds (not reproductively isolated/evolutionarily significant). Citizens then petitioned NMFS to provide the scientific definition/justification for reproductively isolated and/or evolutionarily significant or, in the alternative, to list all 168 West Coast steelhead populations. NMFS chose the latter course, initiating comprehensive reviews of all West Coast salmon and steelhead populations which led to the

Continued on next page
listing of almost all of those populations.

Puget Sound stocks were exempted from those 1990s listings. Over the past 15 years or so, the Puget Sound stocks have collapsed. True to form, neither NMFS nor the Washington Department of Fish and Wildlife sought ESA protection for these stocks. Instead, this task fell to citizens; in this case Washington citizen (and retired WDFW biologist) Sam Wright petitioned NMFS to list Puget Sound steelhead as threatened based on precipitous declines with current populations at about 2% of historic abundance.

NMFS is currently considering that petition. The WDFW opposes listing and proposes an unproven steelhead management plan as an alternative to listing.

However, the WDFW steelhead resource plan is not even a plan. It is nothing more than a draft with vague promises to do better (from the agency that oversaw the declines without taking effective action). It has not been through either the state or federal environmental review process. It has no specific management or recovery goals. It is unconnected to the Department’s own steelhead science paper or the Federal Hatchery Scientific Review Group’s recommendations. It has not been approved by the Washington Fish & Wildlife Commission, Governor or the state legislature – i.e. the draft plan lacks both the force of law and the underlying commitment to funding.

In other words, it is, in its present form, a fig leaf that the state hopes will allow NMFS to defer listing.

In each of the above examples, note the common features: Citizens or NGO initiated the petitions, NOT the agencies responsible for the management of the fish. The management agencies typically resisted listing, even when the populations declined to small fractions of both historic and recent abundance. Without intervention by the FFF, The Osprey and others, the populations would not have been listed.

**Hatchery Treadmill**

When *The Osprey* was founded, the Pacific Northwest was about twenty years into a massive hatchery experiment which, to paraphrase Jim Lichatowich from his book “Salmon Without Rivers,” promised, however implausibly, steelhead without rivers.

**Fish hatcheries successfully tempted fishery managers and many anglers with the false promise of “salmon and steelhead without rivers.” Photograph by Jim Yuskavitch.**

Washington, Oregon, Idaho and California invested billions in this unproven promise. Twenty years later (i.e. forty years into the experiment), this experiment has been a biological disaster for wild steelhead. Adding insult to injury, we have squandered billions of dollars supporting programs which are and have been known to be harmful to wild fish. Imagine the landscape had those funds been utilized to purchase habitat, set aside wild steelhead management zones, invest in careful scientific studies to identify population bottlenecks and so on.

The pernicious harmful impacts have been well documented in numerous independent studies. The Federal government in listing steelhead stocks cited hatchery practices as a major contributing factor to declining wild populations. *The Osprey* has published dozens of those scientific papers, essays, and editorial comment about the risks posed by hatchery steelhead – over-harvest, depressed productivity, reduced life-history diversity within wild populations, competition with wild fish, domestication and disease transmission.

*The Osprey* has consistently urged anglers and management agencies alike to kick the hatchery habit. It is harmful to wild stocks, reducing natural productivity, increasing competition, focusing angling on depressed wild stocks (early returning) and so on. *The Osprey* has contributed to far-reaching changes in the terms of debate. Within the scientific community, there is, finally, a general acceptance supported by extensive data and long-term studies of the many harmful impacts arising from hatchery introductions. The current “debate” is centered on saving the concept with hatchery proponents wishfully promising hatcheries that can be good if we just change the manner in which we operate them. Of course, there is not a shred of evidence to support this hypothesis or to offset the hundred years of trying to substitute domesticated fish for the real McCoy. As the public has come to accept the fact of harmful impacts, there has been an emerging consensus that dramatic change, perhaps even the elimination of some or most hatcheries, is overdue.

As a side bar, the Steelhead Committee, with key allies like

*Continued on next page*
Continued from previous page

Washington Trout, has so far successfully torpedoed the construction of the proposed Grandy Creek hatchery on the Skagit. However, even what should have been an unambiguous victory illustrates how difficult it is to reduce or eliminate hatchery programs. Our side secured a court order preventing the WDFW from proceeding with the Grandy Creek hatchery program. The Department’s response to this court order was to simply act as if it had been approved. A key feature of the Grandy Creek proposal, as well as a key objection in our court appeal, was a plan to double smolt plants in the Skagit. Notwithstanding the court’s rejection of the Grandy Creek plan and a cease and desist order, the Department simply ignored the court and went ahead doubling smolt plants. It is worth noting that the eight year average wild run size after the Department doubled smolt plants is 61% lower than the eight year average prior to the increases – i.e. the more smolts the Department plants, the fewer wild steelhead return. Spend more; get less. Would any business continue with this model where you double the spending to get a 60% lower return? It is possible only in the hatchery world.

Columbia/Snake Recovery

Columbia/Snake recovery and related issues represent the longest running, most consuming and arguably most disappointing and frustrating Steelhead Committee/Osprey campaign. A 35-year orgy of dam construction converted this, the most magnificent salmon/steelhead watershed in the world, into a series of slack water lakes, and blocked with high, impassable dams, access to about 35% of the watershed where salmon and steelhead have been extirpated. The problem is simple – fish cannot safely pass the many dams during either their juvenile or adult migrations. The Columbia/Snake watershed has thousands of miles of pristine, but under or un-utilized habitat because the fish cannot get to the ocean from their natal streams or from the ocean back to their birthplace.

The struggle has been frustrating and disappointing because the federal government has consistently sought to avoid helping fish; especially it has adamantly resisted correcting the migration problem. Unless and until this problem is corrected (by breaching the four useless lower Snake River dams; making other dams safe for up and downstream passage and so on), salmon and steelhead will continue their slide towards extinction. Instead of solving the migration problem, the feds have adopted a bizarre series of marginal steps (trucking fish to the ocean) or fantastic Rube Goldberg techno-solutions (piping juveniles through miles of by-pass piping) at mainstem dams. Overall, the feds and their cohorts have refused to take effective steps to promote salmon/steelhead recovery. This is not just my opinion, but is confirmed by a series of scathing denunciations by federal judges ruling on our petitions relating to recovery plans, biological opinions, fish passage plans and so on. With one exception, our side has prevailed in court while the feds plans have failed to meet the test of the law. Meanwhile, they continue with practices known to be harmful to wild salmon and steelhead – you get the picture. A skeptic would conclude, based upon their actions, that federal authorities (Corps of Engineers, NOAA, Bureau of Reclamation) and agencies (NW Power and Conservation Council, Bonneville Power Administration) have extinction as a primary management goal.

However, given the importance of the Columbia/Snake and its ability to recover if passage is fixed, we (Steelhead Committee and The Osprey) intend to stay in the fight.

Accountable Management

Many of the factors influencing steelhead abundance are well understood and have been the focus of many Osprey articles – the notorious 4 H's (Harvest, Habitat, Hatcheries and Hydro). Salmon and steelhead are in trouble not because we do not understand the science or their biological needs. Rather, they are in trouble because we have decided to take actions that we know will harm wild fish. The Osprey has repeatedly argued for this simpler explanation – failure by management agencies to conduct basic biological monitoring to assess consequences of management decisions combined with a lack of accountability on the part of management agencies. Our favorite whipping boy, of course, is the hatchery mess, if only because it is such an egregious example of managing without data, insisting on a course of action unsupported by science, putting faith in pronouncements rather than facts.

In summary, The Osprey has and continues to make a difference, focusing attention on key issues affecting the future of wild steelhead. Over a twenty year span, The Osprey has made a significant contribution to changing the terms of discussion and evaluation/accountability of management decisions. However, measured against the needs of wild steelhead, the pace of change may not be adequate. Our challenge: can we facilitate adoption of the necessary management actions in time to prevent further extinctions? The time frame is short and the trends ominous.
Steelhead to the Fly

The dilemma of increased fishing efficiency for reduced numbers of fish

By Bill McMillan
— Wild Fish Conservancy—

I

no longer remember the source of a Chinese anecdote I once came upon. It may have been written 3,000 years ago or 400 years ago, but suffice it to say a long time ago in the literature of the oldest remaining human civilization. It went something like this:

As a sage waited for a ferry on the upper Yellow River en route to his hermitage in the Chungnang Mountains, he came upon an old fisherman intent in his practice along the river bank. As he waited, it became apparent the fisherman had no hook on his line. Mystified, the sage asked:

“Dear fisherman, I have noticed that you fish without a hook. How, may I ask, do you intend to catch a fish?”

The old fisherman replied:

“Kind sage, my purpose is not to catch a fish.”

In the excavation of ancient Chinese village sites it has been found that flutes with seven scales were being played 9,000 years ago and that rice wine remained sealed in clay containers — still drinkable. On reading this revelation it came to mind, if the Chinese were listening to the lilting beauty of a flute master while sipping wine 9,000 years ago, has human culture made any appreciable progress since?

The Chinese fisherman well understood the values of fishing other than simply catching fish. It also demonstrates the great difference between the subsistence fishing necessary to tribal peoples of 11,000-100,000 years ago prior to the development of agriculture, and the retained skills of hunting and fishing that have been culturally preserved by agricultural and industrial societies as “sport.”

What is sport? I have not found Webster’s primary definition very helpful: any activity or experience that gives enjoyment or recreation; pastime; diversion. As the Chinese fisherman indicated, sport is more complex. Fishing can be a route to spiritual meaning, whether the civilization is Eastern or Western. Thoreau described the Western equivalent to the Yellow River fisherman in A Week on the Concord and Merrimack Rivers (1849):

“…his fishing was not sport, nor solely a means of subsistence, but a sort of solemn sacrament and withdrawal from the world, just as the aged read their bibles.”

“Adjustments must continually be made to accommodate increasing human numbers and decreasing natural resources.”

However, sport can also provide a tool from which to learn about animals, and even ourselves, through both art and science. Examples of this are John James Audubon’s hunting, from which he was able to learn the structure and intricate coloring of birds and animals that brief viewing from a distance could not provide. In a similar way, but toward more definite ends of scientific theory rather than art, both Charles Darwin and Alfred Russell Wallace were skilled hunters, which provided the collection of thousands of specimens combined with careful notations of each. It resulted in their published theory of the origin of species by means of natural selection — now called the theory of evolution.

Today, millions of hobby bird watchers use binoculars to provide sighting locations of differing species that can be plugged into a world wide computer database of great scientific importance. The sports of fishing and snorkeling could, and should, be adding to a similarly created database for ichthyology and fisheries science.

The purpose of outdoor sport would seem to be a means of retaining connectivity of human beings to a natural world that has otherwise been “fenced-off” from nature’s unpredictability along with crops and domesticated animals. In fact, Homo sapiens is the earliest animal of domestication, and thus the most entirely domesticated. We are the “hatchery fish” of primates.

Carefully cultivated traditions of outdoor sport, to some degree recognized by fish and game managers as necessity, are the outcome of human populations that have expanded in numbers beyond what the natural environment without agriculture could once support. As human numbers continue to increase, there is also a corresponding decrease in the natural environment as an inevitable result.

It doesn’t take anything beyond simple addition and subtraction to see where this is leading. At some point there will be more people than available planet to sustain them. The human species has thus far not proven smart enough to plan a viable future.

One of the necessary adjustments that must continually be made to accommodate increasing human numbers with decreasing natural resources is to regularly reassess how to prevent sporting traditions from further diminishing the resources they are built on while providing continued opportunity for human connectivity to nature.

The Chinese fisherman on the Yellow River made an effective adjustment. The sage who encountered him was like the Webster’s Dictionary. He thought fishing had an easily identifiable purpose of catching fish. The fish-
Continued from previous page

erman provided him with the opportunity of an alternative enlightenment at both the intellectual and spiritual levels. The activity of the sporting tradition of fishing has values beyond what a hook on the end of the line can provide. As the more modern cliché goes: The sport is called fishing, not catching.

At the time of the first issue of The Osprey, wild steelhead runs in 1986 and 1987 were experiencing a brief surge of increased numbers thanks to a shift to higher ocean productivity after nearly a decade of wild steelhead decline. The wild steelhead decline of the 1970s and early 1980s was in the wake of the coast-wide increases in hatchery production that occurred in the 1960s. The 1986-87 balloon of hope would quickly burst in the dire consequences of the 1990s. Salmon and steelhead petitions for listing under the Endangered Species Act popped up throughout the range of West Coast salmon and steelhead populations in the Lower 48.

By the early 1990s I had nearly ceased to fish for steelhead in the grief of what had occurred and the threat that any fishing for steelhead could pose—particularly to the impacted Columbia River and its tributaries.

However, in latter October of 1992 the British Columbia Steelhead Society asked if I would co-host the winners of a fund-raising raffle in their fishing of the Skeena River system through lodges that had generously donated five days of fishing for the cause of wild steelhead conservation. An early snow had fallen. We found the Babine running cold and dark against the backdrop of white.

I had not been to the Babine since my father rented a boat in September of 1963 and we motored 65 miles through Babine and Nikilitkwa lakes to the counting weir. I was to learn there was of many lessons from my father. I used a sinking line as advised by the outdoor magazines for Skeena system steelhead. My father chose to simply enjoy trout fishing with a dry fly. I hooked several steelhead on flies alright, the last a monstrous red fish silhouetted in a leap impossibly far downstream. Even at that distance, it was clear the fly was hooked in the dorsal fin. I lost the entire line as my rod slapped the water in disgust. My father had but one rise to his dry fly in the three days of our short stay, but the description through his joy of telling it remains:

"The fly was drifting back toward me when just 15 feet away a hole was sucked out of the surface like a large foot graphite rod for an 8 weight line roll cast and Spey cast nicely single-handed as often required by the Babine's swollen flow with our backs against the banks. I used 3/0 and 5/0 Winter's Hopes and General Practitioners and occasionally experimented with surface flies despite the 36-39 degree water. There was the good company of the two winning raffle winners, the lodge owner and his hired guide, and conversations at evening with the other lodge guests. The other co-host, Trey Combs, accompanied two other raffle winners at a lodge farther downstream.

It was a fine trip of fresh grizzly tracks in the snow, and the flight of eagles up and downstream—both bears and eagles looking for the remnants of pink salmon. The raffle winners I accompanied hooked 7-8 steelhead between them, landed 2-3 each up to 18 pounds. It was not as many as might have been wished, but given the conditions of high and unseasonably cold water, the results were par or better for the fly fishing methods both anglers chose to use—one a Howell cane rod of 8.5-9 feet in length with a moderate sinking line and classic older steelhead flies; the other a 9 foot graphite rod with a relatively fast sink-tip line and contemporary steelhead patterns.

I did not do as well as they, nor should I have as the host-competition to contributors of the Steelhead Society's conservation efforts. There had been the sudden yank of a 12 pound female as the reel handle caught in my sweater and the rod shot out of my hand—a water skiing downriver. I gamely dove over my head in the 36 degree water to retrieve it, stripped and dried myself with a hanky before the boat returned, and was given the honor of naming the new steelhead run—Last Grab. Also, there had been the shout of the guide when he watched a 15 pound male lash the water in disgust. My father had but one rise to his dry fly in the three days of our short stay, but the description through his joy of telling it remains:

"The fly was drifting back toward me when just 15 feet away a hole was sucked out of the surface like a large foot graphite rod for an 8 weight line roll cast and Spey cast nicely single-handed as often required by the Babine's swollen flow with our backs against the banks. I used 3/0 and 5/0 Winter's Hopes and General Practitioners and occasionally experimented with surface flies despite the 36-39 degree water. There was the good company of the two winning raffle winners, the lodge owner and his hired guide, and conversations at evening with the other lodge guests. The other co-host, Trey Combs, accompanied two other raffle winners at a lodge farther downstream.

It was a fine trip of fresh grizzly tracks in the snow, and the flight of eagles up and downstream—both bears and eagles looking for the remnants of pink salmon. The raffle winners I accompanied hooked 7-8 steelhead between them, landed 2-3 each up to 18 pounds. It was not as many as might have been wished, but given the conditions of high and unseasonably cold water, the results were par or better for the fly fishing methods both anglers chose to use—one a Howell cane rod of 8.5-9 feet in length with a moderate sinking line and classic older steelhead flies; the other a 9 foot graphite rod with a relatively fast sink-tip line and contemporary steelhead patterns.

I did not do as well as they, nor should I have as the host-companion to contributors of the Steelhead Society's conservation efforts. There had been the sudden yank of a 12 pound female as the reel handle caught in my sweater and the rod shot out of my hand—a water skiing downriver. I gamely dove over my head in the 36 degree water to retrieve it, stripped and dried myself with a hanky before the boat returned, and was given the honor of naming the new steelhead run—Last Grab. Also, there had been the shout of the guide when he watched a 15 pound male lash the water in disgust. My father had but one rise to his dry fly in the three days of our short stay, but the description through his joy of telling it remains:

"The fly was drifting back toward me when just 15 feet away a hole was sucked out of the surface like a large foot graphite rod for an 8 weight line roll cast and Spey cast nicely single-handed as often required by the Babine's swollen flow with our backs against the banks. I used 3/0 and 5/0 Winter's Hopes and General Practitioners and occasionally experimented with surface flies despite the 36-39 degree water. There was the good company of the two winning raffle winners, the lodge owner and his hired guide, and conversations at evening with the other lodge guests. The other co-host, Trey Combs, accompanied two other raffle winners at a lodge farther downstream.

It was a fine trip of fresh grizzly tracks in the snow, and the flight of eagles up and downstream—both bears and eagles looking for the remnants of pink salmon. The raffle winners I accompanied hooked 7-8 steelhead between them, landed 2-3 each up to 18 pounds. It was not as many as might have been wished, but given the conditions of high and unseasonably cold water, the results were par or better for the fly fishing methods both anglers chose to use—one a Howell cane rod of 8.5-9 feet in length with a moderate sinking line and classic older steelhead flies; the other a 9 foot graphite rod with a relatively fast sink-tip line and contemporary steelhead patterns.

I did not do as well as they, nor should I have as the host-companion to contributors of the Steelhead Society's conservation efforts. There had been the sudden yank of a 12 pound female as the reel handle caught in my sweater and the rod shot out of my hand—a water skiing downriver. I gamely dove over my head in the 36 degree water to retrieve it, stripped and dried myself with a hanky before the boat returned, and was given the honor of naming the new steelhead run—Last Grab. Also, there had been the shout of the guide when he watched a 15 pound male lash the water in disgust. My father had but one rise to his dry fly in the three days of our short stay, but the description through his joy of telling it remains:

"The fly was drifting back toward me when just 15 feet away a hole was sucked out of the surface like a large foot graphite rod for an 8 weight line roll cast and Spey cast nicely single-handed as often required by the Babine's swollen flow with our backs against the banks. I used 3/0 and 5/0 Winter's Hopes and General Practitioners and occasionally experimented with surface flies despite the 36-39 degree water. There was the good company of the two winning raffle winners, the lodge owner and his hired guide, and conversations at evening with the other lodge guests. The other co-host, Trey Combs, accompanied two other raffle winners at a lodge farther downstream.

It was a fine trip of fresh grizzly tracks in the snow, and the flight of eagles up and downstream—both bears and eagles looking for the remnants of pink salmon. The raffle winners I accompanied hooked 7-8 steelhead between them, landed 2-3 each up to 18 pounds. It was not as many as might have been wished, but given the conditions of high and unseasonably cold water, the results were par or better for the fly fishing methods both anglers chose to use—one a Howell cane rod of 8.5-9 feet in length with a moderate sinking line and classic older steelhead flies; the other a 9 foot graphite rod with a relatively fast sink-tip line and contemporary steelhead patterns.

I did not do as well as they, nor should I have as the host-companion to contributors of the Steelhead Society's conservation efforts. There had been the sudden yank of a 12 pound female as the reel handle caught in my sweater and the rod shot out of my hand—a water skiing downriver. I gamely dove over my head in the 36 degree water to retrieve it, stripped and dried myself with a hanky before the boat returned, and was given the honor of naming the new steelhead run—Last Grab. Also, there had been the shout of the guide when he watched a 15 pound male lash the water in disgust. My father had but one rise to his dry fly in the three days of our short stay, but the description through his joy of telling it remains:

"The fly was drifting back toward me when just 15 feet away a hole was sucked out of the surface like a large foot graphite rod for an 8 weight line roll cast and Spey cast nicely single-handed as often required by the Babine's swollen flow with our backs against the banks. I used 3/0 and 5/0 Winter's Hopes and General Practitioners and occasionally experimented with surface flies despite the 36-39 degree water. There was the good company of the two winning raffle winners, the lodge owner and his hired guide, and conversations at evening with the other lodge guests. The other co-host, Trey Combs, accompanied two other raffle winners at a lodge farther downstream.

It was a fine trip of fresh grizzly tracks in the snow, and the flight of eagles up and downstream—both bears and eagles looking for the remnants of pink salmon. The raffle winners I accompanied hooked 7-8 steelhead between them, landed 2-3 each up to 18 pounds. It was not as many as might have been wished, but given the conditions of high and unseasonably cold water, the results were par or better for the fly fishing methods both anglers chose to use—one a Howell cane rod of 8.5-9 feet in length with a moderate sinking line and classic older steelhead flies; the other a 9 foot graphite rod with a relatively fast sink-tip line and contemporary steelhead patterns.

I did not do as well as they, nor should I have as the host-companion to contributors of the Steelhead Society's conservation efforts. There had been the sudden yank of a 12 pound female as the reel handle caught in my sweater and the rod shot out of my hand—a water skiing downriver. I gamely dove over my head in the 36 degree water to retrieve it, stripped and dried myself with a hanky before the boat returned, and was given the honor of naming the new steelhead run—Last Grab. Also, there had been the shout of the guide when he watched a 15 pound male lash the water in disgust. My father had but one rise to his dry fly in the three days of our short stay, but the description through his joy of telling it remains:

"The fly was drifting back toward me when just 15 feet away a hole was sucked out of the surface like a large
Continued from previous page

an angler from California who was hooking 15 to 25 steelhead day after day using a two-handed rod, a floating shooting-head type line with an enormous strike indicator above a 15 foot long leader, and a heavily leaded black fly suspended beneath. He was a perfect gentleman and did not say much more when he was asked about the many steelhead he caught. He felt genuinely bad for my comparative lack of success and encouraged me to adopt his method. He further explained he had developed the way he fished from reading articles I had written nearly 20 years earlier regarding the effectiveness of large dark nymphs on long leaders and a floating line. I silently cringed. I'd carefully worded the articles describing those methods as having become repetitively and boringly effective and had weaned myself from them. It was apparent that readers retain what they want – not what the writer may intend.

I had spent a lifetime fishing a small river with no prior steelhead fly fishing tradition in the continual company of bait fishermen whose catch of steelhead I could seldom approach with my chosen fly fishing methods. But I came to less easily co-habit the river with a group of fly fishermen from the mid-1970s through the 1980s who hooked sometimes remarkable numbers of steelhead in very low summer flows using large split shot weights just above their nymphs on Hi-D sink tip lines – 50% to 90% of the fish hooked in body parts other than the mouth.

I made a vow as a 9-year-old to accept the joy for the difficult, not the easy, regarding steelhead fly fishing. If one method became too repetitively successful, the idea was to try another and make it yet more difficult for oneself. How else to increasingly learn about the animal of interest?

Quite by accident I came on Clark Van Fleet's Steelhead to a Fly (1951), prominently displayed with its glossy-black cover and a steelhead leaping into the air, as I wandered the sixth floor of Portland's Meier & Frank store with my eight-year old brother in 1954. Every two weeks or so, my parents traveled to the big city to buy family necessities at the “Friday Surprise” sales held in the department store basement where tables were set up to trim inventory of underwear, sheets and pillow cases, and selected hardware items. The sixth floor was chosen for having sporting goods and books as sufficient entertainment to keep us from whining and being underfoot. With stern parental threats regarding the consequences for boys who disobeyed, they were reasonably confident they could find us two hours later. Parents took such risks in those days. On the whole, people were not as afraid as our coddled culture has become.

As my brother would pound the pocket of a Stan Musial baseball glove nearby, I read of Clark Van Fleet's search for steelhead with a fly in two-week installments. How many weeks it took to read its entirety I no longer remember. Steelhead fly fishing did not sound easy, some rivers more difficult than others, with the North Umpqua, Wind, Kalama, Campbell, and Stamp rivers considered examples of “finishing school” level difficulty. I did not want something easy; I did not want something most other people do. Here it was!

Wind River, barely mentioned – but difficult – leapt out at me.

In company with my family, I had crossed Wind River many times in travels up the Columbia River Gorge for Sunday picnics that included trout fishing on the Little White Salmon River.

Wind River. A steelhead “finishing school” near-by. What providence!

In July of 1961, my self-made promise to be a steelhead fly fisherman was fulfilled when I caught a 15 lb. steelhead on a 6-3/4 foot Tenkara rod and a single hook in a #3 dry Ant while fishing from a small rowboat on Wind River.

I quickly came to judge the quality of fishing on the Little White Salmon River.

I continued to develop my craft in the isolation of a small community void of other steelhead fly fishermen – my mentors distant authors who revealed just enough to make me think and to discover on my own. Foremost was the example of Haig-Brown's Fisherman's Summer (1959) and Fisherman's Fall (1968) as I read of his increasing fascination for steelhead on the dry fly. Sport was not meant to be a static thing if practiced at its best.

With the first rise to a dry fly in 1970, I quickly came to judge the quality of steelhead fishing by rise-rises rather than the less interesting mechanical labors of cranking the creatures to beach. I found the greatest satisfaction was to move a steelhead off its lie as far as possible. To do so meant I had achieved an illusion of pattern and presentation that was so complete the fish would move – vertically, horizontally, or both – sometimes great distances. This seemed to me the final and ultimate level of fly fishing. It clearly had become so for Haig-Brown before he chose to immerse himself in snorkeling as a sport of even less risk to the fish he loved.

It was in the 1980s that I began to purposely use surface flies with hooks broken off on back casts. By the 1990s, I began to feel this may provide a plausible future to ethically fish for steelhead when their numbers may be at risk of extinction.

The example of the Babine River in 1992 clearly indicated that simply using a fly rod and fly reel does not necessarily represent sufficient difficulty of method to limit the number of fish each angler may catch without ultimately risking some level of mortality. This is a risk an ESA listed species should not have to, and may not be able to, sustain. As in all methods of fishing, modern technology combined with innovations that try to escape the box of traditional limitations create risks of increased effectiveness. Only we ourselves presently govern our own restraint – agencies largely unwilling to do so.

I do not anticipate any time soon that agencies will use the model of an old Yellow River anecdote to manage fisheries. Nevertheless, there is something about its initial nonsensicalness that makes more sense than most of us are presently prepared to consider. A hundred years from now, a 72 year old fisherman such as myself may ponder his last days of steelhead fly fishing that ended with steelhead extinction in the Lower 48 in the year 2087 as he reads a particular page of Chinese literature.
Managing Declining Steelhead Stocks

By Bill Bakke
— Native Fish Society —

“The salmon, which formerly inhabited the Pacific coast waters in countless millions, extending from Alaska to Monterey, are becoming each year more reduced in numbers in the yearly run, and the question resolves itself into one of almost final extinction or prompt and active measures for their protection…”

J.J. Brice, Commander, United States Navy, 1892

At a fundraiser to protect Skeena Steelhead last fall, writer and conservationist Thomas McGuane said “Steelhead are a management problem.” By that he meant that steelhead get in the way of commercial harvest of salmon, causing a by-catch problem. By protecting steelhead there is a cost to commercial fishermen in terms of salmon catch and steelhead make harvest management a headache.

In 2005, the states of Oregon and Washington proposed to triple the kill of wild steelhead so the commercial fishers could harvest a bumper crop of hatchery spring Chinook. The harvest managers did not tell their commissions that none of the 27 wild steelhead populations in the lower Columbia River were viable. The fact that these fish were also listed as threatened under the federal Endangered Species Act was evidently beside the point. Even the National Marine Fisheries Service, with the authority to recover wild steelhead, agreed with the increased kill. It took a massive outcry from the public to change what seemed to be a fait accompli: The fishery would be approved. Fortunately, the Oregon Fish and Wildlife Commission listened to the public and the evidence and decided to keep the kill at 2% rather than triple it. Since both Oregon and Washington must have consistent harvest management regulations to consummate a fishery on the Columbia, the excessive kill was rejected in 2005. Steelhead are a management problem.

I was asked by The Osprey to write my impression of whether steelhead management has changed or even improved over the last 20 years. I asked many people to provide their reflections on this topic and a few returned their views. I would also like to direct you to two published viewpoints that are well worth reading. One is the essay by Peter Soverel in Dec Hogan’s new book A Passion For Steelhead. In his essay Soverel does not pull any punches, but against all odds he remains hopeful if those with management authority make changes. Another very good assessment is published by the Wild Steelhead Coalition in Washington State called The Status of Wild Steelhead. It too, relies upon management improvements.

Pete Soverel says, “Those new to our sport mistakenly take the present to be the norm, failing to recognize that the present, in reality, is but a pathetic echo of what was and should be. We are fast becoming a generation of anglers perversely accustomed to rivers without steelhead. Equally astonishing, anglers accept these declines without complaint as if a diminished future were the inevitable outcome.”

Some anglers have not accepted the present condition. The Wild Steelhead Coalition (WSC) makes the case that wild steelhead should not be killed in fisheries and challenges the managers to change regulations to protect wild steelhead. Based on a survey of anglers by the Washington Department of Fish and Wildlife, 65% of those anglers with an opinion preferred live release of wild steelhead or closure of the fishery. The WSC authors say, “Clearly, the politics are now on the side of protecting wild fish and the management changes needed to recover the many depleted stocks.”

In order to understand the decline of wild steelhead, one has to go to the literature that attempts to describe it. Bill McMillan, wild fish advocate,
Continued from previous page

writer and biologist, dove deep into the harvest data and reconstructed the steelhead run size for some Puget Sound rivers. That data showed the steelhead run for the Stillaguamish River in 1895 was about 90,000 fish. The present run size averages 569 fish and the conservation goal is 1,800.

On Idaho's Clearwater River, the goal of 10,000 wild steelhead is seldom, if ever, reached. “We have a failed Federal Recovery Plan, and we add to the plight of wild steelhead by dumping hatchery fish on top of them in their spawning and rearing habitat. Sign of the times I’m afraid. Our folks (Idaho Department of Fish and Game) say politics makes them go along with it,” says Steve Pettit, retired IDFG biologist.

Surveys of wild salmon and steelhead abundance in Northwest streams show they are about 1% to 1.5% of historic numbers in California, Oregon, Washington and Idaho rivers, and most populations are listed as threatened species. This means not only less harvest, it also means our rivers are starved of nutrients from salmon carcasses. Biologists now suspect that salmon depletion is also an enormous ecological loss, and just 6-7% of the marine derived nutrients once delivered to the rivers of the Pacific Northwest via salmon are currently reaching streams.

Hal Michael (WDFW) said “With the double whammy from global warming and exponential [population] growth of the Northwest, hope for salmon recovery is dim. If something very big doesn’t happen very soon, you might want to invest your fishing dollars on bass gear. It’s not fine tuning of ecotypes that is needed, it’s a revolution.”

Based on these comments and my own experience fishing for steelhead for fifty years, catching my first fish on a gift fly in Washington’s Wind River, following the lead of Enos Bradner, Mike Kennedy and David Narver, I have come to recognize a good fish manager and smell bad management. Since those days on the Wind when the Rock Pool held a hundred fish, the run has declined, the river was closed and is now regaining its strength as a wild steelhead refuge water. Losing the Wind River fish would be unthinkable, not only because they are wonderful, strong and beautiful but because they are important. Each river and run is important, and as anglers we represent a tiny voice for their persistence.

If steelhead management is to improve, managers and anglers will have to accept what Willis Rich discovered in 1938. Based on his tagging studies he said the only way to maintain the salmon was to accept the home stream theory of management, that is, each stream and each population must be protected. When I asked the question of why the Wind had bigger steelhead than the Deschutes, I had stumbled upon a key concept: the fish are locally adapting to the variability of their home waters. As anglers we have

“I think that wild steelhead management is beginning to improve depending on the state involved, agency leadership and public interest.”

our favorite waters, and it is a short few steps to understanding that the future of the sport and what we hold important can only be sustained by our personal involvement in protecting those home waters. But to do that means causing institutional change as well as securing a commitment from other anglers.

When salmon and steelhead were finally listed as threatened species under the federal Endangered Species Act, institutional change began to happen; management agencies were forced by law to return to Rich’s concept of protecting home streams. Native, wild steelhead became important but only the listed ones are protected by federal law. It is up to us, however, to make it work; and as each of you realizes, we have a long way to go. But we have the basis for making change. Previously, we had to appeal to reasonable people in agencies and hope they had enough influence within their agency to make change. Now we have the Wild Salmonid Policy in B.C. and Washington, and the Native Fish Conservation Policy in Oregon providing management direction, if we are willing to use these administrative tools.

My opinion is that wild steelhead management is beginning to improve depending on the state involved, agency leadership, and public interest. Improving steelhead management means practicing restraint and reducing impacts on the fish and their habitat. This starts by reforming our relationship to steelhead. A major problem has been directly related to our focus on production rather than on productivity. We have embraced the idea that technology can fix ecological problems; that hatchery fish can replace wild steelhead and habitat and sustain the fisheries and even their quality. If that were true, hatchery steelhead survival and contribution to the sport fishery would be equal to that of wild steelhead, but since it isn’t we need to change our thinking. It will be impossible to maintain hatchery production without wild steelhead available to reboot them.

A competent management program recognizes that each watershed has locally adapting populations of steelhead and each population must have the spawner abundance, distribution, and diversity needed to maintain productivity in a constantly changing environment. To accomplish this, a conservation requirement is needed for each river population. Right now, there are few if any wild steelhead populations managed on this kind of sound scientific basis, but we are slowly moving in this direction.

At the same time it is necessary to maintain and improve the habitat conditions that support the life history diversity of wild steelhead. Since our streams are starved of large woody structure and nutrients from salmon carcasses, and have other habitat limitations such as warm water, sediment, toxins and water diversions affecting habitat productivity, wild steelhead productivity is reduced and over too much of their range it has resulted in extinction. At this time the fish management agencies are advisory on habitat conditions affecting the productivity of watersheds. Direct authority rests with other jurisdictions
Continued from previous page

serving interest groups that are in direct competition with steelhead for their habitat.

These factors affecting each wild population and watershed cannot be resolved by simply applying the hatchery fix. Currently, state and federal governments are not organized to maintain native, wild steelhead populations, so institutional change is a major requirement in improving wild steelhead productivity.

To accomplish institutional change and to organize government agencies to protect wild steelhead and their habitat means that the interest groups with the most to lose — anglers — must become engaged. There are many barriers to our involvement, including those of our own making, but they have to be overcome if we are to maintain the rich heritage of wild steelhead for future generations to be inspired by and to use.

Each wild population is important, and each population and home river must have its advocates. We have wild fish policies in place; now we need to make sure they are effective on the ground. We need to replace the industrial model of fish management that relies on techno-fixes with one that is based on ecological understanding and research.

I have developed a conceptual framework to help structure our thinking and involvement. A management program set up to accomplish everything in this framework will improve steelhead management.

A Framework for Wild Steelhead Management

1. Define Conservation Management Units: Based on locally adapted populations by watershed.

2. Inventory Biological Diversity: Genetic, life history characteristics of each population are identified.

3. Adopt Biological Objectives: For each population, adopt biological objectives that include the entire life cycle. These objectives are measurable and they maintain the productivity of the populations and biological diversity across the landscape.


5. Conduct Independent Conservation Audits: Determine whether biological objectives are achieved, resolve critical uncertainties, identify research needs, recommend management changes, and provide accountability.

Steelhead are beautiful animals that have been productive in this landscape we call the Northwest for 40 million years. The northern populations were affected by continental glaciers and repopulated from populations that survived. They are resilient and productive and it is up to us to make sure they are provided the ecological conditions and sound management to survive. So far we have done a miserable job. I recently calculated the loss of wild steelhead in the Columbia River Basin from 1850 to 1981. Historically, about 900,000 wild steelhead called that basin home. But in just 131 years, the runs have declined by 96%. The Columbia River watershed was not only the greatest Chinook salmon stream in the world, it was also the greatest steelhead stream. We have allowed it to be squandered for short-term economic gain and various political justifications.

Management improvements for wild steelhead are better than they have ever been, but progress is dependent on a very small and disorganized constituency, the angler. The major public policy improvement that shifted steelhead management from stocking hatchery fish to protecting genetic and life history diversity of wild steelhead was the Endangered Species Act. The momentum gained through that public policy must be strengthened by us to make sure that if these grand fish ever reach recovery they will remain viable and productive under state management.

Steelhead Sculpture Auction at FFF Conclave

Proceeds to benefit The Osprey

The Osprey will celebrate its 20th Anniversary with a benefit auction item at the Federation of Fly Fishers 42nd Annual International Show & Conclave, July 31 – August 4, 2007 in Livingston, Montana.

Wildlife artist Hank George of Redding, California will create a truly lifelike trophy steelhead carving for auction with proceeds to support continued publication of The Osprey. The successful auction winner will be able to choose from the example on display in Livingston or have the artist recreate a lifelike trophy replica from a photo and description provided by the angler. Color scheme and position can be discussed at the time of order.

A recognized wildlife artist, Hank’s unique and beautifully wrought pieces are carved from kiln-dried western sugar pine, sealed with acrylic undercoats and paints applied by a combination of hand and airbrush. Variations of light, distance, and movement, along with natural iridescence, give wild steelhead the ability to go from completely camouflaged to a stunning array of color on the move. His sculptures represent these qualities and knowledge of his subjects.

Be on the lookout for this one-of-a-kind item at the Conclave. For more information on Wildlife Artist Hank George see the spring issue of The Osprey or contact Norm Ploss at ndeanploss@aol.com.
A Brief History of The Osprey

By Stan Young and John Sager
— Steelhead Committee —

Issue number one of The Osprey was published in January 1987. Its purpose as stated in that issue was to serve as the newsletter of the Federation of Fly Fishers’ newly formed Steelhead Committee to help keep steelhead flyfishers up to date on happenings in the sport.

The Steelhead Committee was born when Starr Thurston, President of the Northwest Regional Council, asked Bob Arnold early in 1986 to form a committee to advise the FFF’s Northwest Regional Council on steelhead policy and to marshal a strong voice for the steelhead resource. The committee’s first members were Bob Arnold, Chairman, Bob Barnes, John Farrar, Fred Joss, Alec Jackson, George Johnson, Bill Mattae, Bill McMillan, Steve Raymond, Bob Strobel, and Stan Young.

At its inception, the committee determined it should publish a newsletter and it managed to produce two per year in its first two years. Those issues were typed and then reproduced on copy machines for mailing. Later, The Osprey began publishing three issues per year. Desktop publishing with a computer began with Issue 5, in January 1989. Its name, The Osprey, was a natural selection because of the association many steelhead flyfishers have with the magnificent winged fish hawk commonly observed by them as they ply their sport along the Northwest’s wild steelhead rivers.

The first few issues saw a printing of about 400 copies. The mailing list consisted of all the names the members of the committee could muster from their own angling acquaintances.

The committee decided very early that its work and the editorial policy of its newsletter would focus on protecting and sustaining wild or stream-bred steelhead as opposed to those introduced to the rivers from hatcheries.

Down through the years The Osprey has had eight editors:

1. Issues one through eight, Stan Young and Bob Arnold on alternating issues:
2. Issues nine through 17, Jack de Yonge,
3. Issues 18 through 27, Linda Hanlon and John Sager
4. Issues 28 through 30, Mark Somers and John Sager
5. Issues 31 through 33, John Sager,
6. Issues 34 through 37, Robert Russell, and
7. Issues 38 to the present, Jim Yuskavitch.

The mailing list has been expanded slowly until it now includes about 1,200 names. Many are steelhead flyfishers, and a great many more are federal and state agency officials, both in the United States and other countries, charged with managing steelhead rivers. Other readers include scientists in academia and government, other conservation organization leaders, and politicians. Initially the subscription fee was $4. The fee is now graduated from $15 to whatever the contributor can give. The annual cost of publishing the Osprey now is about $10,000, with about half paid for from subscribers and the balance provided by the Federation of Fly Fishers.

Our writers are not remunerated for articles. Prior to the present editor, Jim Yuskavitch, virtually all of the labor costs for producing The Osprey were donated. When the committee decided to upgrade, it hired Jim and asked him to turn out a more professional publication. His longstanding interest in the natural world and his experience in editing and publishing have paid off handsomely.

A small editorial board works with Jim in deciding the content of each issue, in securing articles, and in reviewing the issue prior to its being printed and mailed. Printing and mailing are handled by the FFF from its Livingston, Montana headquarters, while content and the mailing list remain functions of the Steelhead Committee.

The Osprey is widely recognized as the foremost publication dedicated exclusively to steelhead and especially wild steelhead conservation. Its hundreds of articles are now available on the Web by accessing the FFF’s website at:

www.fedflyfishers.org/conOsprey.php

Over the years, The Osprey has taken on some big issues, often controversial, but always with its one goal in mind: To preserve and restore wild steelhead populations wherever possible.

Its consistent editorial resistance to the Grandy Creek Hatchery on Washington’s Skagit River is one example. This ill-advised project, the pet political goal of one or two powerful state senators from Skagit country, is still alive, although every scientific and fiscal review of the proposal says...
it should be scrapped. But so tenacious has been the special-interest promotion of the project that it has persisted for more than a decade. See issues 18, 25 and 34 (1993 – 1999).

Skeena River steelhead were another major concern in the 1990s, and the newsletter ran several pieces on the issue, including one penned for The Osprey by Canada’s minister of fisheries and oceans (Issue 21, May 1994). The newsletter’s reach and influence prompted the minister to promise to fix the problem.

One of the newsletter’s little-known contributions was its seminal article on Kamchatka steelhead, in Issue 11, January 1991. That piece was noted by a friend of the editorial committee, Serge Karpovich, who, with the committee’s encouragement, traveled to Moscow and contacted Soviet Russia’s leading steelhead biologists. The committee then invited them to come to the United States for meetings with their counterparts in the Washington State fisheries and wildlife management/academic orbit. The then-new Wild Salmon Center offered to become the management vehicle (which was outside the charter of the Steelhead Committee), and the rest is history, with now more than a decade of steelhead research behind the joint American-Russian scientific consortium. Hundreds of steelhead flyfishers have gone to Kamchatka, collected and recorded thousands of data bits and the project is universally regarded as a huge success. Issues 11, 18, 21, 22, 23, 36.

Snake River dams are another ongoing example, with qualified writers providing well-researched articles and the evidence heralding the long-term benefits of dam removal to both wild steelhead and the affected local economies: By-pass the dams and let the Snake flow free once more. Issues 32, 34, 37, 46, 51, 52.

In a lighter vein, The Osprey has included a series of articles entitled “reminiscences” by such longtime steelhead flyfishers as Walt Johnson, Ralph Wahl, Jerry Wintle and Pete Soverel, each a pioneer in the sport, in which they have written about some of their most memorable angling experiences. The intent of these articles is to describe what the sport was like during its halcyon years so as to inspire present and future anglers to continue and to renew their efforts to save the species from extinction.

Another series of articles by noted steelhead biologists such as Bob Hooton and Curt Kraemer has sought to educate the reader about the biology and life history of wild steelhead.

“Despite discouraging trends in wild steelhead abundance, The Osprey will continue to clamor for what is right.”

Unfortunately, the newsletter in its two decades of table thumping seems to have been fighting a losing battle. The interests that weigh against wild steelhead often gradually get their way. Wild-fish populations have declined, or crashed, as we watch in frustration and anger. But the managers continue to try, even though some of their methods seem doomed to fail.

The management tool known as supplementation is among the latest hoped-for saviors. Wild broodstock, raised in hatcheries, and unmarked hatchery releases are part of this package, which flies in the face of the managers’ own research, now at least 20 years old. Hatchery x hatchery pairings simply don’t work or do hatchery x wild. The newsletter has been reminding its readers of these realities since 1990 when supplementation on the Wenatchee River seemed to be helping (Issue 8). Today, the river is closed to steelhead fishing and its wild steelhead are on the Endangered Species List.

Despite the discouraging trends in wild steelhead abundance, the newsletter will continue to clamor for what we believe to be right and we will continue to publish those authors who speak clearly and with legitimate authority.
State of the Steelhead
An overview of how wild steelhead populations are faring today

Washington

By John McMillan
Oregon State University

Washington State once supported abundant and diverse steelhead populations. As little as fifty-years ago, an angler could list several revered steelhead rivers, including the Wenatchee, Skykomish, Puyallup, Skagit, East Fork Lewis, and North Fork Stillaguamish, to name a few. Now, those streams support only remnant populations of wild steelhead, their ancestors ground down by the mechanisms of industrial Darwinian selection: harvest, hydropower, hatcheries, and habitat degradation. Washington's industry rolls on and population continues to surge as fisheries management practices stagnate, raising one major question: What is the state of steelhead in Washington?

Currently, steelhead populations are listed as “Threatened” in four of the seven Evolutionarily Significant Units (ESU), or Distinct Population Segments (DPS), in Washington (Snake River, Upper Columbia, Middle Columbia, Lower Columbia). Although Southwest Washington steelhead are not listed, they are of concern, and only the Olympic Peninsula (OP) continues to support steelhead populations that are relatively abundant. Within the past year, Puget Sound steelhead were proposed for listing as Threatened by NOAA.

The proposed ESA listing in Puget Sound should come as no surprise. The rigorous and insightful scientific population assessment by the NOAA Biological Review Team does not paint a pretty picture. Historically (~ 1895) the estimated abundance of adult steelhead was between 327,592 and 818,980 steelhead (based on harvest records). The most recent 10-year estimate for average steelhead abundance in Puget Sound watersheds is 13,083 fish. Although we will never know exactly how many steelhead existed in Puget Sound 100 years ago, it is clear that the current abundance is easily less than 10% of the historic estimate from 1895. If the steelhead are listed, then it will be five of seven ESU’s with Threatened populations.

On the other end of the spectrum, Washington Department of Fish and Wildlife claims that over 90% of the steelhead populations on the Olympic Peninsula are rated as “Healthy.” However, historical harvest records on two major rivers suggest otherwise. The Queets is the most compelling example. Harvest records from 1923 suggest the winter steelhead population ranged from 48,980 to 81,633 fish based on an estimate by Bill McMillan of Washington Trout, which indicates the population is only 8 to 13% of what it was in 1923. Similarly, Mr. McMillan estimates that the Quinault winter steelhead population is only 26% of that in 1952 population. While the historical estimates are limited to a few years of harvest, it seems clear that the aforementioned populations have dramatically declined over the past 50 to 80 years.

In contrast to the Queets and Quinault, the Hoh and Quileute rivers remain as relative strongholds for winter steelhead. According to the same estimates by Mr. McMillan the Hoh River winter steelhead population is 34% to 56% of the 1948-1961 average, and the Quileute is estimated to be 83% of the 1948-1961 average. Although these populations remain bright spots for Washington State, the Olympic Peninsula populations will surely experience similar declines if land use, harvest management, and hatchery practices continue on their current path.

Based on this brief review, the outlook for steelhead in Washington is dim at best. If population trends continue down their current path, steelhead may be listed in all of the ESU’s within the next 50 years. Or perhaps, the trajectory will change as humans learn to live with their environment, rather than at the expense of it, in which case the young anglers of today will still be able to fish for the beautiful “grey ghost.” Either way, anglers, conservationists, scientists, and policy-makers have a tough task at hand, the balance of which will determine the fate of steelhead and anglers into the foreseeable future.

Oregon

By Bill Bakke
Native Fish Society

Status of wild, native steelhead in West Coast rivers is of concern to anglers, for the future of their fishery hangs in the balance. Steelhead are locally adapted to their home rivers, and among Pacific salmon species they have the most diverse life history. They are more vulnerable to watershed abuse that limits their reproductive success in the freshwater spawning and rearing period because they depend on streams for a longer time than most Pacific salmon. That said, steelhead are tremendously resilient and many summer-run populations use ephemeral streams for reproduction. These streams dry up in their lower portions, land locking the rearing juveniles sometimes for years until the water conditions allow the smolts to leave.

Steelhead are not as abundant as most salmon species but are dependent upon large numbers of salmon spawners to energize their rearing streams with nutrients.

Like all salmonids, steelhead utilize the whole watershed to support their reproductive success, even those parts of the watershed that they cannot reach, for they are dependent on cold water that is free of toxics and fine sediments. However, most watersheds are not protected adequately to afford the conditions they require.

Steelhead are often subject to overharvest in mixed stock sport and commercial fisheries, and a notable example is the by-catch allowed in salmon net fisheries in the lower Columbia that

Continued on next page
Continued from previous page

kill steelhead in fisheries aimed at Chinook and coho harvest.

Hatcheries also interfere with the reproductive success of wild steelhead because of interbreeding and competition for available habitat.

All these pressures, most of which are compounded by human use of the habitat and fisheries, have resulted in most wild steelhead being protected under the Endangered Species Act.

The status of wild steelhead is an important issue, because without wild steelhead our sport fisheries do not have a chance. Below, I provide a sketch of wild steelhead status in Oregon. This information is primarily derived from a 2005 status review by the National Marine Fisheries Service.

Middle Columbia River

The majority of NMFS’ Biological Review Team (BRT) said the steelhead were “likely to become endangered” and found moderate viability risk. The Deschutes and John Day rivers are close to or slightly above interim recovery targets, but stray hatchery fish still dominate the run on the Deschutes.

Lower Columbia River

The majority of the BRT said the steelhead were “likely to become endangered.” They found moderate viability risk. Most populations of steelhead are at low abundance, and those with data have a relatively high extinction probability. Four populations have gone extinct, and hatchery fish dominate in many populations.

Upper Willamette River

The majority of the BRT said the steelhead were “likely to become endangered.” They found moderate viability risks, but the total abundance is small. Recent increases in run size (2001 and 2002) are encouraging. A positive factor is that releases of early winter-run hatchery steelhead have been discontinued, but the continuing releases of non-native summer steelhead are a major concern.

Coastal Oregon

Steelhead on the Oregon coast have been a candidate for federal listing since 1998. The Oregon Department of Fish and Wildlife (ODFW) completed a status review of coastal steelhead in 2005.

Oregon Coastal Winter Steelhead

The ODFW describes the coastal wild winter steelhead as vulnerable and potentially at risk. There are 23 winter steelhead populations from the Necnicanum River in the north to the Sixes River in the south. ODFW says: “Lack of data resulted in significant assumptions regarding abundance and productivity” and “inferences from other information for populations provide a qualified level of confidence in the assessment of interim criteria” used to determine the status of each population. Based on this assessment the Necnicanum, Lower Nehalem, Wilson, Siletz, Yaquina, Alsea, Yachats, Coos, and Coquille rivers failed to meet target criteria. Hatchery spawners were too high and data on abundance is lacking for many streams. Rogue and Umpqua rivers were considered to be not at risk.

Oregon Coastal Summer Steelhead

The ODFW describes the North Umpqua and Siletz summer steelhead populations as vulnerable and potentially at risk. The lack of reproductive independence by the North Umpqua population and low productivity of the Siletz River population indicate the near-term sustainability...is potentially at risk. Hatchery fish make up 20% of natural spawners in the North Umpqua, but hatchery fish have been blocked at Siletz Falls to provide protection for summer steelhead in that river. Rogue River summer steelhead are considered to be not at risk.

Idaho

Bert Bowler
Idaho Rivers United

Snake River wild summer steelhead were listed as threatened in 1997 because of declining populations. Wild stocks have generally followed the trend of wild Chinook salmon in the basin. Recent returns are troublesome - especially for B-run steelhead.

Idaho supports most of the remaining habitat for wild steelhead in the Snake River Basin. The Clearwater and Salmon river drainages continue to provide large amounts of quality spawning and rearing space that is underutilized.

Snake River steelhead are comprised of two groups, A-run and B-run, based on migration timing, adult size and ocean age. For management purposes, steelhead that pass Bonneville Dam before August 27 are considered A-run while those counted after August 27 are B-run. When using size to discriminate between the two groups, A-run steelhead are those measuring less than 31 inches and B-run more than 31 inches. A-run are thought to predominately reside in the ocean one year while B-run predominately two years.

B-run steelhead are found only in Idaho tributaries. The Clearwater River drainage is almost entirely B-run and the Salmon is considered 30% B-run. Historically the Clearwater had the reputation for the largest B-run steelhead, especially the North Fork that is now blocked by Dworshak Dam.

Snake River steelhead were first separated into A and B-runs in 1985 at Lower Granite Dam. Wild A-run fish have ranged from a low of about 5,000 in 1990-91 to 38,000 in 2001-02 with 16,000 returning in 2005-06. B-run steelhead bottomed out in 1999-00 at 900 fish and peaked at 14,000 in 2002-03. The return in 2005-06 was just under 2,000 Bs. During the fall of 2006, at Lower Granite Dam, wild A-run numbers were about 7,000 and wild Bs were 1,400 — a bleak picture for the large steelhead. The 2006-07 steelhead run will not be completed until the spring of 2007.

NOAA Fisheries is currently working on steelhead recovery plans for the Snake River Basin. The plan’s overall objective is to achieve a condition that will allow delisting the species. NOAA is assessing the current viability status (extinction risk) of the listed units. They also are looking at the causal factors that contributed to the initial listing and will make a determination if those factors are being adequately
West Coast Wild Steelhead Stock Status

Map courtesy of the Wild Salmon Center
addressed. The federal hydropower system, hatcheries, habitat, harvest and the Pacific Ocean are causal factors for decline.

The draft plan identifies 25 different extant wild steelhead populations in the Snake River Basin in five Major Population Groups — Lower Snake (Tucannon R., Asotin Cr.), Grande Ronde, Imnaha, Clearwater and Salmon rivers. The populations range from basic to very large in size and complexity. Threshold abundance for a basic population is 500 and 2,250 for a very large one. Viability is measured in abundance/productivity and spatial structure/diversity parameters.

To date, all 25 wild steelhead populations do not meet NOAA’s viability criteria. Many populations are classified as high risk for abundance/productivity that is mostly influenced by out-of-basin survival. The federal hydropower system [outside the basin] has been identified as the largest human-caused limiting factor for adequate abundance/productivity. The Pacific Ocean with its inherent changes in productivity does influence viability, but it has been cycling up and down for eons.

Since there is an abundance of quality habitat in the Clearwater and Salmon River watersheds habitat improvement can do little for meeting viability standards. This does not mean that continued habitat enhancement is not worthwhile. Hatchery production and harvest are part of the equation, but even if all salmon and steelhead hatcheries were closed and harvest were eliminated, most stocks could not attain the required low risk on the viability scale.

Population viability coupled with recent trends in run size is very discouraging for wild Snake River steelhead. The federal government continues to discount the importance of needed survival improvements in the mainstem migration corridor. Removal of the four lower Snake River dams still offers the best opportunity for recovering wild Snake River steelhead.

California

By Katie Perry, California Department of Fish and Game and Norm Ploss, Federation of Fly Fishers

California has six Distinct Population Segments (DPS) of steelhead as determined by the National Marine Fisheries Service (NMFS). Four of the six are listed as threatened (Northern California, Central Valley California, Central California Coast, and South-Central California Coast); one as endangered (Southern California) and one was determined to not warrant listing (Klamath Mountains Province). The two northern DPSs include summer, winter, and half-pounder runs of steelhead, while the remaining DPSs include only winter steelhead.

Monitoring efforts in California are inadequate to properly assess population abundance, and trends and conclusions about stock status are problematic. Only a few streams are monitored for adult returns, and where we have juvenile abundance or density data, we do not know how these data relate to the status of the adult populations. Based on the limited data available it appears that California’s steelhead populations range from stable to declining.

The Department of Fish and Game is currently developing a Coastal Salmonid Monitoring Plan with assistance from NMFS. In addition, two separate but coordinated monitoring planning efforts will be initiated this spring that will focus on steelhead monitoring and adult Chinook salmon escapement monitoring in California’s Central Valley.

Sport fishing in California for steelhead trout remains a popular recreational activity. Steelhead streams could be divided in many ways, but might be primarily thought of as coastal streams and the Central Valley Sacramento and San Joaquin River systems. The coastal streams vary from very large rivers (Klamath, Eel) to small creeks. Streams along the coast with viable fishing range from the fabled Smith River winter fishery in the far northwest corner of the state to at least Monterey Bay for the Carmel and San Lorenzo rivers. The latter are mostly of local interest with some fishermen reporting catches from December through February. The Klamath still serves as the object of articles that proclaim fine fishing, and continues to receive the greatest steelhead fishing effort and catches throughout the state. Streams from the Mad to the Mattole consistently provide excellent catches of steelhead.

Central Valley streams are vastly different. Where steelhead exist, for the most part they are served cooler water by dam releases from the Central Valley Project and State Water Project. Dams have blocked access to historic upstream spawning and rearing habitat. Some believe that these once great steelhead streams are now great resident rainbow trout streams because of the tail water conditions that now exist below the dams.

On average, the majority of steelhead fishing in California occurs in the Klamath, Trinity, Smith, American, Feather, Mad, and Russian rivers. The Klamath, Mad, Mattole and Yuba rivers had the highest likelihood of catching a steelhead on a given fishing trip.

Another notable activity concerning steelhead streams where fishing is not the major focus is the effort of local watershed groups to improve ecosystem function on streams still containing steelhead or resident rainbow trout. These watershed groups have made steelhead recovery one of their primary goals. Active watershed groups are found on San Pedro Creek (a coastal stream in San Mateo County), San Francisco Creek, Stevens Creek and Alameda Creek (in South San Francisco Bay) and San Luis Obispo, Rincon and Carpinteria creeks (in southern California).

Great Lakes Region

By Rick Kustich
Co-author “Fly Fishing for Great Lakes Steelhead”

To analyze the status of Great Lakes steelhead today, I think it is important to gain a historical perspective. Steelhead strain fish were first brought to the Great Lakes in the late 1870s. Naturally occurring runs were established in all five of the lakes (Ontario, Erie, Huron, Michigan and Superior) shortly thereafter. Wild steelhead have existed in the Great Lakes for a longer period than brown trout have existed in the United States. Steelhead runs and the growing interest in steelhead throughout the region were bolstered by increased stockings that occurred
in the late 60s and early 70s as part of a reclamation effort of the lakes. The biggest change in the last ten years has been a greater emphasis by fisheries managers on long-term management and the development of healthy wild stocks where possible.

There are portions of the Great Lakes where the rivers and streams are no longer or never were suitable for natural reproduction. This is the case for most of the rivers along the southern shore of Lake Ontario and Lake Erie. Also the southern and western shoreline of Lake Michigan has only limited reproduction capabilities. Most of the wild populations exist in Ontario and Michigan. Pockets of wild steelhead are also found in New York, Minnesota and Wisconsin.

Lake Superior has been the least impacted by mans' indiscretions. The Canadian shoreline along the north shore of the lake is managed as a wild, self-sustaining fishery. Jon George, biologist for the Ontario Ministry of Natural Resources, states that individual rivers have genetically unique populations that have developed individual migration and life history strategies. The greatest recent threat to the fishery seemed to be angler harvest. Since enacting a one fish per day limit, fish counts have rebounded markedly. The current assessment is that there are adequate numbers of repeat spawners and sufficient recruitment of juvenile fish. Very restrictive limits on wild fish populations on the Lake Superior rivers located in Wisconsin, most notably the Brule, and Minnesota have also increased the wild fish counts in these states.

Wild fish numbers on rivers running into Lake Huron and Lake Ontario and more restrictive limits could improve some fisheries. Increased access to spawning water and stream improvements to spawning tributaries have benefited a few of the Lake Huron rivers and the Grand River, which is a tributary to the north shore of Lake Erie.

Michigan has the most storied history with respect to Great Lakes steelhead. Significant populations of wild fish exist throughout the state. A few rivers are managed specifically for wild fish and others are supplemented with planted steelhead. The Little Manistee River has long been the barometer for wild steelhead health in the state. The returns there for 2004 and 2005 were toward the lower end of the twenty-five year average. Some of the other rivers in the state seemed to fare slightly better during that time frame. Many anglers and guides would like to see tighter limits on both the lake and rivers.

In my state of New York, tributaries to both the Salmon River and Cattaraugus Creek produce some wild fish. A one fish limit and an ever growing catch and release ethic have resulted in a significant rebound of fish numbers on the Salmon. Along the Lake Erie shoreline, Jim Markham and Bill Culligan of the New York State Department of Environmental Conservation are spearheading a project that could greatly increase the production of wild fish on the Cattaraugus. Currently, a dam blocks access to fertile upper stretches of the river. It is anticipated that a feasibility study relative to fish passage will be performed in the upcoming year. If passage is attained, it is expected that the positive impact on wild steelhead production of the river system would be significant.

There are many threats. The alewive populations, which are depended on by Chinook salmon in Lakes Ontario, Michigan, and Huron, are on the decline. While steelhead also feed on alewive, their diet is much broader. But the reduced carrying capacity of the lakes places additional fishing pressure on steelhead. Also, invasive species dumped into the lakes by sewage cargo ships provide a constant threat. To this point, the resilient lakes have been able to adjust to the many newcomers.

Having fished extensively on the West Coast and in the Great Lakes, there is little doubt that wild fish here share the same spirit as their Pacific counterparts. They look and act the same in every way. From a purely anecdotal standpoint, after being involved with the fishery for nearly thirty years, the opportunity to fish for wild steelhead in the Great Lakes is probably better now than at any other time during that period. We need to work to keep it that way.

British Columbia

By Art Lingren
Angling and Conservation writer

In the September 2006 issue of The Osprey, Craig Wightman gave an overview of Vancouver Island steelhead. The runs on the Island’s east coast have suffered serious decline over the past decade while the runs on Vancouver Island’s west coast have fared somewhat better. This report provides an overview of the Dean, Skeena system and the Thompson River. The returns to those rivers, one in the north, one mid-coast and one in the southern part of the province, are good indicators of the health of wild steelhead returns to the province, and it is those rivers that people who fish steelhead associate with British Columbia’s wild steelhead.

It is difficult to predict future returns with all the variables from in-river conditions that affect young steelhead and, to a lesser degree, returning adults, which may spend many months in the river prior to spawning in the spring of the next year. Ocean survival has been a problem in recent years and in general the trend indicates that 2007 will be similar to the returns of 2005 and 2006 and well below the average.

Dean River

Each year Williams Lake fisheries staff prepares a summary report on the Dean River fishery. Although the report is not complete, the draft report is shared in early December with the participants of the Dean River Advisory Group. The 10-year average catch on the Dean River is about 3,400 steelhead. The catch for 2006 at 2,117 is significantly below the 10-year average. However, this year with 500 more fish landed, it was better than the 2005 season. [Editor's Note: Catch figures are for fish caught and released. There is no kill on the Dean.] Anglers on the Dean River were treated to very good water conditions for most of the season as indicated with a CPUE (catch per unit effort) of 0.69 fish. But that was still below the 10-year average of 0.86. Although the run in 2006 is well below the 10-year average, it is estimated that 2,200 steelhead will reach the
Continued from previous page

spawning grounds.

The Skeena System

Fisheries staff in Smithers do an estimated escapement comparison on August 24th each year. Since the large returns of the late 1990s into the early 2000s, the estimated escapement for 2006 as of August 24th into the Skeena system rivers is about 20,000 steelhead. This is similar to the return of 2005 and much below the nearly 60,000 estimate of 1998. The 2006 return was predicted to be weak. However, the sockeye returns to the Skeena were large and when you have big salmon returns and a weak steelhead return, the steelhead do suffer because of the intense commercial and First Nations fisheries. On a personal note, I spent 28 days fishing the Skeena and its tributaries and found fish in short supply. I enjoyed exceptional water conditions during my trip and lost only two days to coloured water. Interspersed with a number of blank days, mostly on the Skeena proper, the most fish I hooked in a day was three. Over the 28 days of fishing my hook rate averaged just over a fish a day.

The Thompson River

Based on the Albion Test Fishery, this season on the Thompson is the worst of the 13 year record based on test fishery catch results for the entire month of September. Fishing was generally poor as is expected when the return is small, but the poor fishing was compounded by some large storms, which coloured the river below Spences Bridge for days on end. With the downward shift in ocean and freshwater survival in recent years, the steelhead return for the Thompson in 2007 is expected to reflect the low ocean and freshwater survival of past years.

Russia

by Pete Soverel
Wild Salmon Center and Steelhead Committee

The status of Russian steelhead is mixed, with a few stocks at very high levels of abundance with the full range of life-history diversity expressed in the population. Most other stocks are depressed, perhaps critically depressed.

In Kamchatkan rivers, steelhead exhibit an interesting, even puzzling, array of life histories and phenotypes that contrast rather sharply with North American populations. Typically, in North America, steelhead are (or at least were) found in virtually all streams with access to/from the sea and were distributed from approximately the U.S.-Mexican border to well out in the Aleutian chain. In Kamchatka on the other hand, the anadromous forms predominate in some river systems with only occasional specimens of resident form present. In others, the resident form will dominate with only a sprinkling of anadromous forms. In still others, both resident and anadromous forms will be present in substantial numbers. Further, based on DNA sampling, it is clear that in all cases surveyed to date, when both resident and anadromous forms are present, they constitute a single, homogenous breeding population. The habitat in almost all Kamchatkan riverine systems remains pristine, so that, absent human interferences, steelhead are able to express the widest possible diversity of life history forms. In the Utchholok River on the mid-west coast of Kamchatka, steelhead exhibit 19 different life histories:

1. Typical steelhead: smolting at 1-3 years of age and spending 1-5 years at sea with repeat spawners making up over 50% of the population (8-30 pounds);
2. Non-spawning steelhead: some sexually immature steelhead return to the river to over-winter in the river but will not spawn the next spring (typical specimens are 8-12 pounds);
3. Half-pounders: smolting at 1-3 years, returning that fall to over-winter in the river and then returning to sea for 1-3 years (16"-18" fish as half pounders and then typical steelhead size after over-wintering at sea. Repeat spawning is common);
4. Resident-Estuarine: spending 1-5 years in fresh water before spending summers in estuarine or near-shore waters (adult fish are typically 4-10 pounds);
5. Resident-Estuarine-Steelhead: same as above but after one or more spawnings as estuarine fish, they go back to the sea and over-winter before returning 1-3 years later as true steelhead;
6. Resident: never go to sea. Mature fish are typically 18"-26".

Historically, steelhead were found in significant numbers in about twenty rivers on Kamchatka's west coast. Except for the Utchholok and Kvachina/Snotalvayam rivers (more on these systems below), steelhead populations have been seriously compromised by poaching. Not only is the overall abundance low, the life-history diversity has been dramatically reduced. While steelhead are still found in major steelhead rivers such as the Oblukovina, Krutogorovo, Utka, Primpta, Bystrya, Opala, and Sopochnaya, their numbers are severely depressed and the populations are subject to high levels of illegal fishing.

Interestingly, steelhead are largely absent from Kamchatka's east coast rivers for reasons that are not understood. The Pacific Ocean is warmer than the Sea of Okhotsk, which one would think would encourage anadromy. Last spring, I know of one enormous steelhead (estimated weight 40-45 pounds) captured in a Chinook fishery. It was the only steelhead caught in that fishery in a river with a very robust population of resident rainbow trout.

Even though most Kamchatkan steelhead populations are depressed, there is hope. The Wild Salmon Center and its Russian partners (Moscow State University and the Kamchatkan NGO, Wild Fishes and Bio-Diversity Foundation, with financial support from the Gordon & Betty Moore Foundation) maintain a scientific and enforcement presence on the Utchholok and Kvachina/Snotalvayam rivers. The results are dramatic. Steelhead numbers on these three rivers are very high and the fish have completely recovered their life-history diversity. The demonstrated recovery capacity of these steelhead means that if poaching can be brought under control before the other populations become extinct, those populations will be able to recover quickly given the pristine nature of their habitat.
2006 STEELHEAD STATUS SUMMARY

California
- 6 distinct populations
- Populations range from stable to declining
- Monitoring program is inadequate to assess population abundance and trends
(California does not have a management program that can describe the status or establish a recovery program for wild steelhead)

Oregon
- 76 steelhead populations
- 49 winter steelhead populations
- 30 summer steelhead populations

Winter Steelhead Status
- Coastal Region
  23 populations, potentially at risk, ESA candidate species since 1998
- Rogue River Basin
  8 populations, not at risk
- Lower Columbia River Basin
  9 populations, at risk, ESA-listed threatened
- Willamette River Basin
  9 populations, potentially at risk, ESA-listed threatened

Summer Steelhead Status
- Coastal Region
  2 populations, potentially at risk, ESA candidate for listing since 1998
- Rogue River Basin
  2 populations, not at risk
- Lower Columbia River Basin
  1 population, at risk, ESA-listed threatened (Hood R)
- Mid-Columbia River Basin
  11 populations, at risk, ESA-listed threatened
- Snake River Basin
  5 populations, not at risk, ESA-listed threatened
- Klamath River Basin
  2 populations, at risk, not ESA-listed

Washington
- 141 populations
- 36 healthy
- 44 depressed, 1 critical
- 60 unknown status
  - Puget Sound
    Proposed ESA-listed species
  - Lower Columbia River Basin
    ESA-listed threatened
  - Mid-Columbia River Basin
    ESA-listed threatened

Snake River Basin
- ESA-listed threatened
- Upper Columbia
  ESA-listed threatened (Status changed from endangered and is being legally contested.)

Idaho
- 4 wild steelhead populations
- 4 ESA-listed as threatened

Assessment of Status
- 1960s  100% wild (averaged 70,000 steelhead)
- 1975-1979  59% wild
- 1985-1986  24% wild
- 1995-1999  11% wild (8,200)
- 2001-2005  16% wild (31,000 - improved ocean conditions)

- Hatchery steelhead spawning naturally in Idaho streams is less than 15%
- About 1 million unmarked hatchery steelhead released by Idaho and Oregon in the Snake River tributaries (2005). These fish mimic wild steelhead because there is no external mark.
- Recovery run size is 60,000 wild steelhead (Sharma and Yuen 2006)
- 1990-2001 smolt to adult survival rate (SAR) ranged from 0.1% to 3.1% naturally produced steelhead at Lower Granite Dam (Bill Horton IDFG 2006)
- The smolt to adult survival rate (SAR) needed for consistent spawner replacement is 2% to 6% and this level of survival has not been attained on a regular basis.
- Estimated naturally produced smolts since 1989 is 1 million
- Carrying capacity in Idaho streams has not been reached in recent decades
- Sixty percent of the historic habitat is still available for steelhead and 30% is in wilderness areas or scenic river corridors. Sixty nine percent of the habitat is on federally managed lands.

British Columbia
- 400 to 630 wild steelhead populations
- 85% are winter steelhead
- 12% are interior summer steelhead
- 3% are coastal summer steelhead

- Southern B.C. wild steelhead populations are depressed and some are near extinction. There is a northward trend in depression of stocks.

Alaska

Southeast Alaska stocks are stable.

Data provided by Bill Bakke from the 2006 Pacific Coast Steelhead Meeting at Fort Worden State Park, Washington, March 7-9, 2006
The second BiOp in 1994 continued the “no jeopardy” conclusion, was again the object of a suit, this time by American Rivers and others, and was declared moot by the appeals court because, by then, there was a third BiOp. The 1995 BiOp finally admitted that the hydro system jeopardized the salmon. Again conservationists including the Federation of Fly Fishers sued, but the district and appeals courts let that BiOp stand, the only Columbia BiOp to hold up under court inspection.

NOAA released its 2000 Columbia BiOp, its fourth, in December of that year. It acknowledged that the measures prescribed in the 1995 BiOp were not avoiding jeopardy and that the surest way to recovery would be dam removal. But it did not call for overhaul of the hydro system and promised other habitat, hatchery, and harvest measures to avoid jeopardy and extinction. In April 2001 the Bonneville Power Administration declared a power emergency, took control of the hydro system, and violated the flow and spill provisions of the 2000 BiOp. The result was that 2001 was the worst in-river out-migration since ESA listings began. In May 2001, 15 conservation organizations including FFF sued NOAA for the 2000 BiOp's violation of the ESA. In May 2003, Judge James Redden rejected the 2000 BiOp, saying it relied on actions not certain to occur and on which there had been no interagency consultation. He sent it back for a one year remand (rewrite) with numerous checkpoints. He noted that he would be looking for hydropower mitigation actions up to and including the possible breaching of Snake River dams.

NOAA produced its fifth BiOp near the end of 2004. Instead of responding to the court’s direction, the 2004 version took a defiant step away from steelhead and salmon recovery under the ESA in major ways. It reset the “environmental baseline” to include the dams, meaning dam breaching was off the table. It said the hydro system presented no jeopardy to listed fish, based largely on a surge in adult returns in the early 2000's caused primarily by improved ocean conditions. And it reset the target as extinction avoidance, rather than recovery. The conservation plaintiffs in previous suits came right back at this BiOp, and Judge Redden threw it out in May 2005, gave NOAA one year to remand, and showed signs of impatience. The new BiOp is now due for completion no later than July 31, 2007. We wait for it, not with high expectations, but with determination to stay the course in demanding a science based recovery plan.

NOAA Hatchery Policies

Almost since its inception, The Osprey has spoken out on the harmful effects of hatchery operations on wild stocks. In the January 1991 issue Dr. Ray Hilborn of the University of Washington School of Fisheries challenged the common perception of that time that hatcheries can be used to keep salmon and steelhead going over the long haul. He wrote, “Most evidence suggests that while hatcheries may work initially, their success decreases after a few years. ... the conclusion – hatchery production is probably not sustainable over decades.” The landmark National Academy of Sciences/National Research Council report, Upstream: Salmon and Society in the Pacific Northwest, voiced similar strong warning on the danger of hatchery operations to wild populations.

NOAA Fisheries seemed to respond to these increasingly evident problems by including only the wild fish in most of its ESA listings of salmon and steelhead in the 1990's. One exception was the Upper Columbia Steelhead Endangered listing, in which they included hatchery fish on the assumption that the wild stocks were too far gone to recover without a boost from hatcheries. Until 2001, NOAA had done the right thing, limiting ESA listings mostly to wild fish. But in September 2001, federal district judge Michael Hogan decided a suit brought by the Alsea Valley Alliance, a property rights, agricultural, and real estate group seeking delisting of wild Oregon Coast coho. Judge Hogan ruled that if hatchery fish and wild fish are included in the same ESU, the entire ESU must be listed or not listed, and that NOAA could not split the ESU for listing purposes. He ordered the entire ESU to be delisted due to hatchery coho populations. His decision was based on a legal issue, not the science. NOAA did not defend aggressively its own scientific findings that hatchery fish harm wild stocks, nor did it appeal the Hogan decision. Conservation organizations intervened and appealed, but the appeal was denied and Oregon Coast coho are currently unlisted.

It is important to emphasize that Judge Hogan did not rule out placing wild and hatchery fish in separate ESU’s. Given the science, this is exactly what NOAA should have done. The decision has spawned a flurry of delisting petitions and suits and abundant confusion about the future of the hatchery fish. Later in 2001, NOAA announced that it would develop a new hatchery policy and apply it to the 24 affected salmon and steelhead listings. Conservation groups petitioned NOAA to put wild fish and hatchery fish in separate ESU’s.

In April 2004, NOAA announced its new draft hatchery policy and finalized it in 2005. It states that hatchery fish will be included in the same ESU with wild fish if the hatchery fish are “no
more than moderately divergent from a natural population in the ESU.”

This policy completely defies the science and the law. The purposes section of the ESA begins: “The purposes of this Act are to provide a means whereby the ecosystems under which endangered species and threatened species depend may be conserved ….” That means wild species and habitat protection, not hatchery clone mitigation. The science has been building for years, with Bill Bakke counting more than 25 peer reviewed studies confirming the impacts of hatchery on wild. A single quote from the Salmon Recovery Science Review Panel, which provides scientific advice to NOAA Fisheries, is representative. In 2004, the Panel wrote in discussing the effectiveness of local broodstock hatcheries, “it appears that the proposed hatchery policy directly violates the thinking of leading NMFS scientists.”

In 2005 NOAA also downlisted Upper Columbia steelhead from Endangered to Threatened based on hatchery fish numbers, in spite of dangerously weak wild stocks.

Conservation organizations sued NOAA in the fall of 2005 seeking to overturn the new hatchery policy, and in 2006 also sued in opposition to the downlisting. A decision could come in 2007 on both actions.

Conclusion

So where do things stand now? Of the 27 steelhead and salmon ESU’s originally ESA listed, 26 continue to be listed, having survived the NOAA review of 2003-2004. Only the Oregon Coast coho have been delisted, on a legal issue, not the science. None of the listed fish have actually recovered to the point that they can be delisted.

A new front in the assault on listed steelhead has opened in the last couple of years. Three suits have been filed that, in addition to claiming that hatchery and wild fish are the same, argue that steelhead and resident rainbow trout are the same, in spite of their obvious life history differences. The objective of these suits is delisted steelhead based on hatchery steelhead and resident rainbow numbers. These suits may come to a head in 2007 and, if decided for the plaintiffs, could cause loss of ESA protection for many steelhead stocks.

The ESA twice has come under attack in the Congress, most recently in 2005 when the ESA “Reform” bill, sponsored by former Rep. Richard Pombo (R-Calif.), passed the House. It would have gutted the ESA and fortunately went nowhere in the Senate. For his efforts Rep. Pombo was removed from office by his constituents in the November 2006 election.

Pete Soverel wrote in the January 2001 issue of The Osprey: “At the end of ten years, from a fish’s perspective, not much has changed. … We thought the long reach of the law, especially the ESA, could provide a safety net for wild stocks. We were wrong. … In reality judges … are loath to take over management from the agencies responsible.”

Since Pete made that assessment, some things have changed. In the January 2005 issue of The Osprey, we wrote: ‘The year 2004 marked the time when the Federal Government … abandoned even the slightest suggestion that it was seriously interested in implementing the Endangered Species Act to protect the anadromous salmonids of the American West Coast.’ The 2004 Columbia BiOp and the new hatchery policy, both radically worse for the fish than their predecessors, were the primary drivers of that statement.

Things were in danger of getting much worse for the fish. Every wrong turn by NOAA Fisheries has been met by conservation organizations’ legal actions. The year 2007 will be huge for wild anadromous fish, and the courts will be critical to their future. Will fish destroying practices be implemented, or will they be stopped in court? Recent history has demonstrated that court decisions aren’t a cure all for wrong headed government actions, but they are our best bet at this time.

The absolutely critical importance of federal court appointments and confirmations has never been more certain. Anglers and conservationists need to weigh in with their senators on these appointments.

To receive The Osprey, please return this coupon with your check made out to The Osprey - FFF

THE OSPREY

NAME
ADDRESS
CITY/STATE/ZIP
PHONE E-MAIL

Yes, I will help protect wild steelhead
☐ $15 Basic Subscription
☐ $25 Dedicated Angler Level
☐ $50 For Future Generations of Anglers
☐ $100 If I Put Off Donating, My Fish Might Not Return Home
☐ $_______ Other, Because ____________

Thanks For Your Support

The Osprey — Steelhead Committee Federation of Fly Fishers 215 E. Lewis St., Suite 305 Livingston, MT 59047
The Osprey wishes to thank the dedicated people and organizations who gave their financial support in 2006. Our readers are our primary source of funding. It’s pretty remarkable that our home-grown journal, which only comes out three times a year, has developed such a generous following. Don’t think we’re not grateful, and a bit humbled.

We have always skated on thin financial ice, and will continue to do so. But without your support we fold up. The usual donation envelope is provided. Whatever you can afford will be much appreciated (and used wisely).

$1000 or More

Yvon Chouinard

$200-$499

Jerry L. Myers
Washington Fly Fishing Club
Wild Salmon Center

$100-$199

Peter Broomhall
Arthur L. Carlson
Gary D. Clark
Clark-Skamania Fly Fishers
Scott Hagen
Don Johnson
David R. Koopmans
Steve Lewis
James C. McRoberts
Native Fish Society
John Rosenberg
Ron E. Schwarz
South Sound Fly Fishers
Pete Soverel
Chris Stromness
John L. Sullivan
John A. Titland
Stanford Young

James R. Holder
A. Felton Jenkins
Gregory P. Johnson
Donald L. Johnstone
Richard Kennon
Jon B. Lund
A. Ted Pearson
Eric A. Pettine
Norm Ploss
Bill Redman
Jerry Rogers
Yale Sacks
Paul J. Swacina
John Thomson
Lory Watkins
Thomas J. Weseloh
Forrest Wood

$25-$49

Robert G. Bailey
Bruce M. Baker
Danny Beatty
Robert J. Behnke
Robert L. Bettzig
Richard T. Burge
Kirk F. Giloth
Thomas G. Henderson
Reginald Heth
Mark Homeyer
Richard E. Johnson
Michael W. Laing
Robert J. Masonis
Berkeley T. Merchant
Christine Moffitt
Bill Morrish
John Narver
Michael L. Ogle
RDR Services, Inc.
Jerry E. Reeves
Michael P. Rogers
Doug Smith
Lee Spencer
Brad Staples
Don Starkin
R. H. Taylor
Bill Warren
Ralph K. Wetherell
Philip C. White
Richard C. Williamson
David D. Woolridge
Sam Wright

$50-$99

Barbara L. Brown
Gerry Byrnes

THE OSPREY

Federation of Fly Fishers
215 E. Lewis St.
Suite 305
Livingston, MT 59047

Address Service Requested